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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/574,358	03/30/2006	Tsutomu Yajima	NNA-222-B	5858

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YOUNG BASILE  
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EXAMINER
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COOLMAN, VAUGHN

ART UNIT	PAPER NUMBER
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3618

NOTIFICATION DATE	DELIVERY MODE
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03/18/2010

ELECTRONIC

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

docketing@youngbasile.com  
audit@youngbasile.com

<b>Office Action Summary</b>	<b>Application No.</b> 10/574,358	<b>Applicant(s)</b> YAJIMA, TSUTOMU	
	<b>Examiner</b> VAUGHN T. COOLMAN	<b>Art Unit</b> 3618	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 22 December 2009.
- 2a) ☒ This action is **FINAL**.                      2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-8 and 10-18 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-3, 10-13, 16 and 17 is/are rejected.
- 7) ☒ Claim(s) 4-8, 14, 15 and 18 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |   |   |
|---|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)                    | 4) <input type="checkbox"/> Interview Summary (PTO-413)           |
| 2) <input type="checkbox"/> Notice of Draftperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____                                      |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)         | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____   | 6) <input type="checkbox"/> Other: _____                          |

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## **DETAILED ACTION**

### ***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

**Claims 1-3, 10, 12, 16, and 17 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hirano (U.S. Patent No. 6,460,642 B1) in view of Asao et al (U.S. Patent Application Publication No. US 2004/0251858 A1).**

**[claims 1 and 12]** Hirano discloses an inverter buffer structure for a vehicle including:

an inverter (40) disposed in a compartment of the vehicle;

a radiator core support (radiator 42 is supported by some structure in the vehicle compartment);

a buffer member (33) that is disposed directly adjacent to the inverter and is disposed directly adjacent to the radiator core support, such that the buffer member is disposed between the inverter and the radiator core support, wherein deflection of the radiator core support in a front to rear direction of the vehicle during a head-on collision of the vehicle causes engagement of the buffer member with the radiator core support and the inverter such that the buffer member reduces the amount of an incoming force that is applied to the inverter during the collision.

Hirano does not explicitly disclose the radiator core support constituting a frame portion of the vehicle. Examiner notes that it is old and well known and would have been obvious to one of ordinary skill in the art at the time the invention was made in the vehicle art to support the

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radiator core of an automobile utilizing a portion of the vehicle frame for ease of assembly and manufacture. Examiner also notes that it would appear from FIG 2 of Hirano that the buffer member 33, the radiator 42, and the inverter 40 are all located at an overlapping vertical location (note the portions of the transaxle case 45 and motor 10 underneath both the battery and inverter). Assao also teaches a vehicle (in the embodiments shown in FIGS 4-7) wherein an inverter is located at the same altitude as the battery.

**[claims 2 and 16]** Hirano does not explicitly disclose a restraining means for a lower surface of the buffer member. However, Assao teaches a restraining means (16A) for restraining a lower surface of a vehicle battery. It would have been obvious to one of ordinary skill in the art at the time the invention was made to provide restraining means as taught by Assao in order to prevent the battery from moving during vehicle use.

**[claims 3 and 13]** Hirano does not explicitly disclose the buffer member being supported by a bracket provided on the inverter. However, Assao teaches a vehicle battery (6) being supported by a bracket (16) provided on the inverter. It would have been obvious to one of ordinary skill in the art at the time the invention was made to provide a bracket on the inverter to support the buffer member in order to integrate the components in the vehicle compartment for ease of assembly and disassembly.

**[claim 10]** Hirano further shows the inverter being located on a first side of the vehicle and an engine (2) of the vehicle being located on a second side of the vehicle that is opposite the first side.

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[**claim 17**] Hirano further provides an open space (as shown in FIG 2) between the inverter and the buffer member that would allow movement of the buffer member with respect to the inverter in the front-to-rear direction of the vehicle during the collision.

**Claims 1 and 11 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hirano in view of Abujudom II et al (U.S. Patent No. 4,976,327).**

[**claims 1 and 12**] Hirano discloses an inverter buffer structure for a vehicle including:  
an inverter (40) disposed in a compartment of the vehicle;  
a radiator core support (radiator 42 is supported by some structure in the vehicle compartment);

a buffer member (33) that is disposed directly adjacent to the inverter and is disposed directly adjacent to the radiator core support, such that the buffer member is disposed between the inverter and the radiator core support, wherein deflection of the radiator core support in a front to rear direction of the vehicle during a head-on collision of the vehicle causes engagement of the buffer member with the radiator core support and the inverter such that the buffer member reduces the amount of an incoming force that is applied to the inverter during the collision.

Hirano does not explicitly disclose the radiator core support constituting a frame portion of the vehicle. Examiner notes that it is old and well known and would have been obvious to one of ordinary skill in the art at the time the invention was made in the vehicle art to support the radiator core of an automobile utilizing a portion of the vehicle frame for ease of assembly and manufacture. Examiner also notes that it would appear from FIG 2 of Hirano that the buffer member 33, the radiator 42, and the inverter 40 are all located at an overlapping vertical location

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(note the portions of the transaxle case 45 and motor 10 underneath both the battery and inverter). Abujudom also teaches a vehicle compartment wherein the battery is located at an altitude (towards the top of the compartment adjacent the vehicle hood) coinciding with the altitude of the inverter as shown by Hirano.

**[claim 11]** Hirano fails to disclose the buffer member being an air intake part. Abujudom teaches an air intake part (20) surrounding a vehicle battery (22) analogous to the vehicle battery of Hirano. It would have been obvious to one of ordinary skill in the art at the time the invention was made to provide the battery of Hirano with the air intake part as taught by Abujudom in order to provide cooling for the battery. The combination would disclose the buffer member being an air intake part (the enclosure of Abujudom).

#### ***Allowable Subject Matter***

Claims 4-8, 14, 15, and 18 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

#### ***Response to Arguments***

Applicant's arguments with respect to claims 1 and 12 have been considered but are moot in view of the new ground(s) of rejection.

***Conclusion***

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to VAUGHN T. COOLMAN whose telephone number is (571)272-6014. The examiner can normally be reached on Monday thru Friday, 10am-8pm EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Paul Dickson can be reached on (571) 272-7742. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/S. Joseph Morano/  
Supervisory Patent Examiner, Art Unit 3617

VAUGHN T COOLMAN  
Examiner  
Art Unit 3618

/V. T. C./  
Examiner, Art Unit 3618